SENSORED DESCRIPTION FILE

SECTION 1 - GROUP H



SPOILER ALERT

A simple browser extension within a reach of a single button, maximizing user experience by censoring unexpected spoilers.

DESCRIPTION

Our system uses AI-driven technology to filter spoilers without any assumptions or efforts from the user. It's backed with a type of Recurrent Neural Networks called Long Short-Term Memory or LSTMs for short. Long Short-Term Memory (LSTM) networks are a type of recurrent neural network capable of learning order dependence in sequence prediction problems. This is a behavior required in complex problem domains like machine translation, speech recognition, and in our case for text classification.

The model consists of three inputs, namely:

- **Embedding Layer:** The first neural network layer, which can be thought of as an alternate to one-hot encoding along with dimensionality reduction.
- Hidden Layer: This is the secret sauce of our network which allows the model to learn and extract features.
- Output Layer: This layer will allow us to output the probability of a review being a spoiler or not using the Softmax function.

Our system works by getting raw text data as input and feed it to an artificial neural network classifying whether it is a Spoiler or Not. This process is automated by using Amazon Web Service specifically;

- Amazon Sagemaker for model training and deploying,
- Amazon S3 bucket used for storing raw and preprocessed data needed by our model.
- Amazon Lambda, allowing communication between the API gateway and Sagemaker and,
- Amazon API gateway to receive user input using a simple web interface.

Details of the code are hosted on GitHub which can be found through the following link: https://github.com/samuel-Kurabachew/spoiler_alert